Tyonek Overall Economic Development Plan

2007

Developed for

The Native Village of Tyonek

by

ALASKA VILLAGE INITIATIVES

NEW HORIZONS FOR RURAL ALASKA

Native Village of Tyonek
Overall Economic Development Plan Outline

I. Community Background and Overview
    a. Intro and existing conditions
    b. Land and Climate
    c. Environmental issues

II. General Economic Analysis (economic indicators)
    a. Analysis of State economy
    b. Analysis of Tyonek's economy
        i. Employment and earnings; unemployment; impacts
        ii. Demographics
        iii. Population growth, trends, distribution

III. Economic Sectors
    a. Natural Resources
        i. Coal
        ii. Timber
        iii. Fisheries
    b. Tourism
        i. Cultural
        ii. Outdoor recreation
    c. Community Development
        i. Social Services
        ii. Education
        iii. Infrastructure
            1. Transportation
            2. Water/sewer
            3. Phone
            4. Internet
            5. Electrical Power
        iv. RAPIDS Database- recent infrastructure projects in Tyonek

IV. Community Goals & Priorities
    a. What does community want?
    b. Setting goals and objectives
    c. Implementation Plans

Community Background & Overview

Tyonek is an unincorporated community which lies on a bluff on the northwest shore of Cook Inlet, 43 miles southwest of Anchorage. Tyonek is not located directly on the Kenai Peninsula, but lies within the jurisdictional boundaries of the Kenai Peninsula Borough and Kenai Peninsula School District. It lies at approximately 61.068060° North Latitude and -151.136940° West Longitude. (Sec. 01, T011N, R011W, Seward Meridian.) Tyonek is located in the Anchorage Recording District.

The area encompasses 67.6 sq. miles of land and 1.2 square miles of water. Winter temperatures typically range 4 to 22 degrees Fahrenheit; summer temperatures average from 46 to 65 F°. Temperature extremes have been recorded from -27 to 91 F°. Average annual precipitation is 23 inches, including 82 inches of snow.

History:
It is a Dena'ina (Tanaina) Athabascan Indian village unique in many ways. Being at the southern end of Athabascan influence, it is one of the only known coastal Athabascan communities and therefore the only known Athabascan whaling village. Tyonek is an Athabascan village meaning "Little Chief", and the indigenous inhabitants are known as the Tebughna people, which means "People of the Beach".

Various historic settlements in this area include Old Tyonek Creek, Robert Creek, Timber Camp, Beluga and the Moquawkie Indian Reservation. Captain Cook's journal provides a description of the Upper Cook Inlet Athabascans (in 1778) who possessed iron knives and glass beads. He concluded that the Natives were trading indirectly with the Russians. Russian trading settlements were established at "Tuiunuk" and Iliamna prior to the 1790s, but were destroyed due to dissension between the Natives and the Russians. Between 1836 and 1840, half of the region's Indians died from a smallpox epidemic.

The Alaska Commercial Company had a major outpost in Tyonek by 1875. In 1880, "Tyonok" station and village, believed to be two separate communities, had a total of 117 residents, including 109 Athabascans, 6 "creoles" and 2 whites. After gold was discovered at Resurrection Creek in the 1880s, Tyonek became a major transportation hub for goods and people. A saltery was established in 1896 at the mouth of the Chuitna River north of Tyonek. In 1915, the Tyonek Reservation (also known as Moquawkie Indian Reservation) was established.

The devastating influenza epidemic of 1918-1919 left few survivors among the Athabascans. The village was moved to its present location atop a bluff when the old site near Tyonek Timber flooded in the early 1930’s. The population further declined when Anchorage was founded.

In 1965, the federal court ruled that the Bureau of Indian Affairs (BIA) had no right to lease Tyonek Indian land for oil development without permission of the Indians themselves. The tribe subsequently sold rights to drill for oil and gas beneath the reservation to a group of oil companies for $12.9 million. The reservation status was revoked with the passage of the Alaska Native Claims Settlement Act in 1971.

Beluga, a site near Tyonek, is owned by Chugach Electric Association and provides some electricity for south central Alaska (including Anchorage) and the railbelt.

Environmental Issues

Subsistence activities provide salmon, moose, beluga whale and waterfowl.

Beluga Whales

The Cook Inlet Beluga hunt was dropped again in 2007 due to the decline in population. The 2006 population estimate of 302 belugas confirms an annual 5.6 percent population decline since 1994, and a 4.1 percent annual decline since 1999. In 1999 beluga harvest began being formally regulated, and since that time harvests have been limited to zero to two whales a year.

In 1997 the beluga whale was listed as a Species of Concern. NOAA Fisheries is expected to announce soon whether or not the agency will propose that the Cook Inlet beluga whale population be listed under the Endangered Species Act.

There is not currently a scientific answer as to why the whale population has not recovered as expected.

Salmon

Salmon is the number one subsistence resource in the Village of Tyonek. Most all fish for subsistence are taken in nets just off the beach along Tyonek lands. According to local information, essentially 100% of subsistence needs for salmon are met primarily with King and Silver Salmon.

Additional use of fisheries is the King and Silver run in the Chuitna River. In addition to subsistence uses, Tyonek Native Corporation (TNC) has a fishing lodge which is contracted out to an operator. Locals are employed as guides and service staff. A flying survey of the Chuitna River was conducted in the fall of 2004 prior to snow fall to determine if any major negative impacts had occurred from logging. A large buffer was maintained around the main river and all tributaries which could be seen. No major on site concerns were noted at that time. TNC has also considered granting a conservation easement along the Chuitna River to protect both subsistence and recreational fishing.

Moose

No specific data exists for the moose populations on Tyonek lands unto themselves. However, Tyonek is in Game Management Unit 16b (10,405 mi.^{2}) and information for that Unit can be applied to the current status on Tyonek. Unit 16b was created in 1972. A summary report of moose population status and harvest statistics was published in 2001 on the ADF&G website.

In the early 1980's moose populations were estimated at over 10,000 which is a density of approximately 1 moose per square mile. The population number has significantly declined over the past 25 years to an estimated population in the fall of 2003 of 3387 moose, or .34 moose per square mile. Since 1996, unit 16b

surveys have shown less than 20 calves per 100 cows. For a robust stable population to be maintained the calf cow ratio should be 20-30 calves per 100 cows.

Moose harvest in the unit has also significantly declined since the mid 1980s when a high harvest of 581 moose occurred. From 1983-1988 an average of 495 moose were harvested annually. In 2001 the board of game reduced the number of tags for the unit from 1050 for both sport and subsistence harvesting to 400 for subsistence only. In 2002, only 69 moose were harvested in the Unit. The Board of Game objectives for Unit 16b is 6500-7000 moose with an annual harvest of 310-600 moose per year for both sport and subsistence hunters.

As described above the moose population has significantly declined over the last 20 years. According to local information only about half of the moose subsistence needs for the Village of Tyonek are met on an annual basis. The Board of Game estimates that there is a need for a minimum of 199-227 moose available for harvest to meet the amount necessary for subsistence. The Department of Fish and Game expected that 214 moose would be available for the 2004-2005 hunting season. However, in 2002 only 69 moose were harvested in GMU16B.

Status of Predator Populations

Black Bears

As with moose, there are no specific data relating to black bears on Tyonek lands. Reported harvest levels have fluctuated from 67 to 250 with an average of 136 since sealing requirements began in 1972. In 1976 a management goal assigned to Unit 16 was to provide the greatest opportunity to participate in hunting black bears. In 1992 the ADF&G adopted a black bear population objective for Unit 16 to maintain a population size that appears unaffected by human harvest. This is considered by maintaining a complete constant age structure for both males and females as measured by skull size of harvested animals. The harvest number goal for Unit 16 was set at less than 210 bears with an annual sow harvest not to exceed 69. The 16B subunit goal was not to exceed 56 sows annually.

Information from line transect surveys conducted in the northern portion of Unit 16 conducted in spring of 2000 and 2001 produced an estimate of 29.3 bears per 100 square miles. Applying this density to the entire suitable habitat in Unit 16 generates a population estimate of 2,700 bears. Previous estimates ranged from 1,825-3,650 bears in the Unit. However, the skull size of sealed boars indicates an increasing trend of the last 20 years and sow skull size has increased over the past five years. This indicates a stable to growing population size however; these data would be more accurate if a tooth was extracted to collect age rather than just skull size as an indicator of age.

In 1999 and again in 2001 the Board of Game adjusted their black bear population and human use objectives in order to reduce the black bear population. The purpose of this reduction is to positively impact the moose population. The new human use objective is a 3-year average harvest of greater than 270 black bears with 45 in 16A and greater than 225 in 16B. A female harvest of greater than 30% of the total harvested in the Unit is encouraged. The Board of Game has increased the spring baiting season by 15 days to encourage additional harvest and increasing the baiting area.

Tyonek Native Corporation has also encouraged black bear hunts through the use of their lodge facilities. These hunts have been coordinated with local residents and the Tyonek Tribal Conservation District to maximize harvest numbers while minimizing negative impacts on local hunters.

Wolves

Wolf predation in Unit 16 was not considered an important factor until the mid-1990s. During March of 1993 an aerial survey was conducted to estimate the wolf population in Unit 16. The minimum population was estimated between 48-62 wolves, which were assumed to be an increase form the previous five years. A second aerial survey in 1999 revealed a minimum of 119 wolves in 13 packs in 16B alone. This is at least doubling of the population in six years. The moose to wolf ration declined from 160-250:1 in 1993 to approximately 40:1 in 1999.

The wolf population in Unit 16B was estimated in 2002 to be 140-200 wolves. Harvest of wolves by hunters and trappers has increased annually from 15 in 1997 to 48 in 2001. The moose to wolf ratio in 2002 could be as low as 17:1. The spring 2003 wolf population estimate for 16B was 88-137 wolves in 16 packs. The new spring population objective for wolves in Unit 16B has been set at 22-45 wolves in 3-5 packs.

On March 10, 2004 the Board of Game authorized a predator control program that involves airborne or same-day airborne shooting of wolves in Unit 16B. This program will be in effect until June 30, 2009. They have adjusted the bag limit from 5 to 10 and have liberalized methods and means for harvest including the use of snow machines.

Brown Bears

Brown bears are a significant predator on moose calves and will take adult moose as well. There is little historical data on brown bear populations in Unit 16B. The current estimate is 530-1050 bears. The new goal of the brown bear harvest is to reduce the population by maintaining a minimum three-year average harvest of 28 female bears over two years of age. The last three years an average of 26 bears have been harvested. During the last 10 years, the total brown bear annual harvest has been from 34-80.

The Board of Game has taken several actions to liberalize the brown bear harvest in Unit 16B including:
• extending the brown bear season
• eliminating the brown bear tag fee
• the brown bear bag limit is one every year and not counting it against the one bear every four year bag limit in other units.

Potential Impacts of Coal Mine

Potential impacts to subsistence values are large. However, with proper planning and management most of these impacts can be mitigated in regards to subsistence values. Potential impacts can be classified into several areas of concern including:
1. Direct impacts to moose habitat by site and transportation infrastructure;
2. Direct impacts to stream, river and ground water quality which then may impact subsistence fisheries;
3. Ocean transportation facilities which may impact fish migration along the Tyonek portion of the Cook Inlet;
4. Increased access to subsistence resources through transportation system development;
5. Increased demand on subsistence resource through increase populations both in the village and in the town of Beluga.

Mitigation. A scoping document and an Environmental Impact Statement were developed in 1984 and 1990 respectively. It has been recognized and is imperative that Tyonek work with the development of the coal field if possible to ensure that appropriate precautions are taken to minimize the potential subsistence impacts.

Habitat mitigation. The footprint of the development as well as the road system will reduce the amount of habitat available for moose. This will occur both through direct loss of habitat but also through reduced habitat use near primary development and transportation corridors. Although moose can adapt to disturbances as they have in populated areas such as Anchorage, hunted moose populations remain much more skittish and will probably avoid high traffic areas.

Prior planning to reduce traffic in high quality habitat areas and as habitat is rejuvenated make sure the placement is remote from high traffic areas will mitigate much of this impact. Developing a long term Resource Management System for developing and maintaining high quality habitat can mitigate the loss of habitat.

Spruce Bark Beetle

Since the mid 1970's beetles have killed mature spruce trees on 1 million acres of the Kenai Peninsula – about 50 percent of the peninsula's forested land. Overall, Kenai Peninsula spruce beetle activity has decreased from 49,200 acres in 1999 to 73,000 acres in 2000 (a 33% decrease).

Around Tyonek, active spruce beetle infestations continued in 2000 in west-side Cook Inlet stands with ownership by the Kenai Peninsula Borough, State of Alaska, and Alaska Native Corporation ownerships (TNC, CIRI). New infestation decreased significantly to 3,700 acres mapped versus 40,100 acres in 1999. Most of the continuing and new beetle activity was observed north of Tyonek, between the Beluga River drainage and Little Mt. Susitna (2300 ac), with scattered small spots of new activity along the coastal lowlands between Beluga, and easterly toward Anchorage. The long-infested stands between Tyonek and Tuxedni Bay did not show visible, new spruce beetle activity and are now composed of 90+% beetle-killed spruce.

Active harvesting of beetle-infested stands by private corporations may have had a positive impact on beetle infestation mitigation efforts.

General Economic Analysis

State of Alaska

Gross Domestic Product (GDP)

In 2006, Alaska's Gross Domestic Product grew to $41 billion. This represents a 5% increase from the 2005 figure of $39 billion. The main drivers for this growth was listed by the State of Alaska Department of Commerce, Community and Economic Development as government, oil and gas, professional and technical services, finance and insurance, and transportation and warehousing. Also contributing to the GDP growth is health care/social assistance and information technology. It should be noted that "real GDP", which has been adjusted to account for inflation, increased only .007%.

In respect to Gross Domestic Product per capita, Alaska ranks sixth in the nation with $43,748, which is 116% of the national average of $37,714. In comparison, Delaware led the nation in per capita GDP with $59,288.

Population

The state's population continues to grow, though at a slower rate than the national average. The provisional census figure for July, 2006, estimates Alaska's population at 670,053 an increase 627,533, a 6% increase since 2000. The annual growth rate in 2006 was only 1.02% compared with the national average of 5.9%, and currently Alaska ranks 47th in the nation in total population.

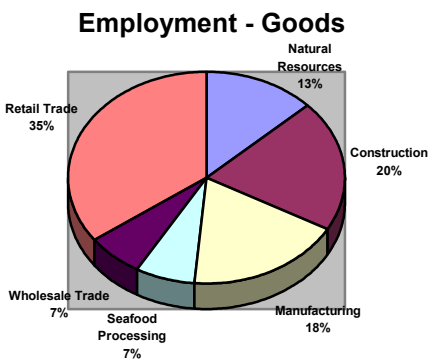
Alaska's population growth appears to be totally driven by natural increase (births minus deaths), as the net migration has remained flat with an estimated 35,000 people per year moving in the state in comparison to 35,000 people moving out each year. Natural increase has added an estimated 7,300 people per year to the state's population.

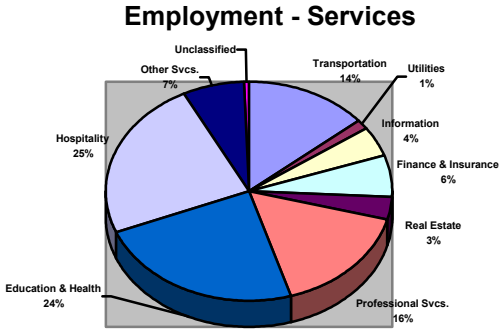
The vast majority (81%) of Alaska's population growth has occurred in south central Alaska in the Municipality of Anchorage (45%) and the Mat-Su Borough (36%), with the Mat-Su Borough growing at the fastest rate in the state with an annual growth rate of 4.2%. This has potential future implications for Tyonek considering the Mat-Su Borough is located directly northeast of the village, though no road connection exists at present. Should a road be built in the future, access to services and retail shopping will greatly expand as Tyonek would be connected not only to the road system, but also to the fastest growing region of the state. Potential positive impacts will be balanced with substantial negative impacts due to increased access.

Employment

Alaska enjoyed another year of job growth in 2006, with salaries growing by $700 million for a total of almost $13 billion. Approximately $200 million of that growth was in the Oil & Gas industry. In the services sector, the fastest growing industry was health care. An estimated 4,200 total jobs were added to the Alaska economy in 2006.

Following are two charts showing employment by sector from the U.S. Department of Commerce, Bureau of Economic Development for 2006.





Natural Gas Demand

Current bulk prices for natural gas have decreased from a peak of $15 per total cubic feet in 2005 from the 2006 average of close to $6. The 2006 average is still much higher than historic trends which ranged in the $2 per total cubic feet range that predominated in 2001. Current national trends should continue to push these prices higher. 10 year projections for natural gas demand in the United States show an estimated growth to 85 billion cubic feet per day, with production numbers estimated at only 60 billion cubic feet per day (from Exxon Corporation interview). On the international perspective, this is also a concern as emerging and developing economies around the world are relying more on natural gas than oil to fuel their growth. Within 30 years, Asia, South America, and Africa are expected to account for nearly 75% of all natural gas consumption (from the EIA International Energy Outlook 2006).

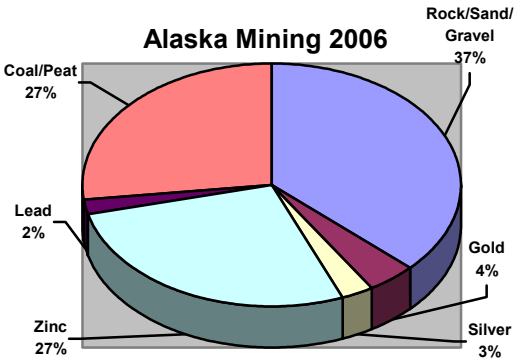
These trends indicate significant pressure to build a natural gas pipeline from Prudhoe Bay to south central Alaska, and could potentially increase Cook Inlet exploration and production.

Mining

Alaska's mining industry had an exceptional year in 2006, nearly doubling from $1.8 billion to $3.5 billion. Continued growth is expected in 2007 with a combination of increased production and strong markets. This growth is even more dramatic when compared to little or no growth from 1996-2003. The value in this industry can be broken down into production value of $2.8 billion, development of $487 million, and exploration valued at $177 million. Construction at the interior Alaska Pogo mine was completed, by itself a $347

million dollar investment, now producing an estimated 100,000 ounces of gold. Notable mine construction is also occurring at the Kensington mine, Rock Creek (Nome), and Nixon Fork (McGrath). Exploration, planning, or permitting are also active at Chuitna/Beluga Coal field (Tyonek), Pebble gold deposit (Iliamna), and Donlin Creek gold deposit.

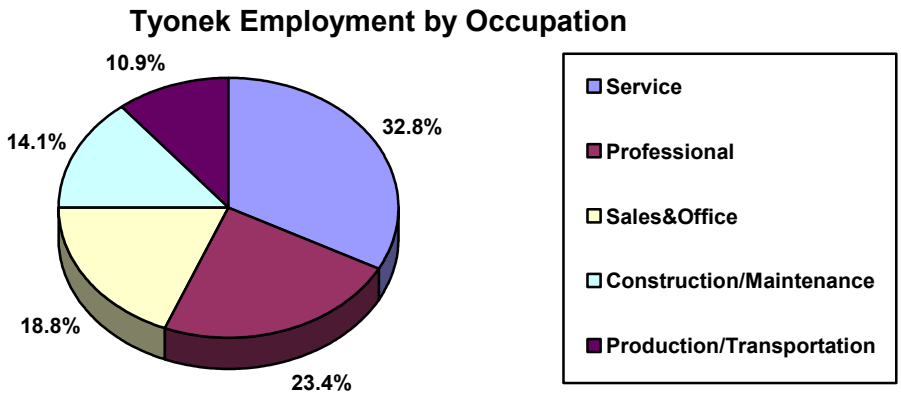
The value of Alaska's mining industry in 2006 by product:

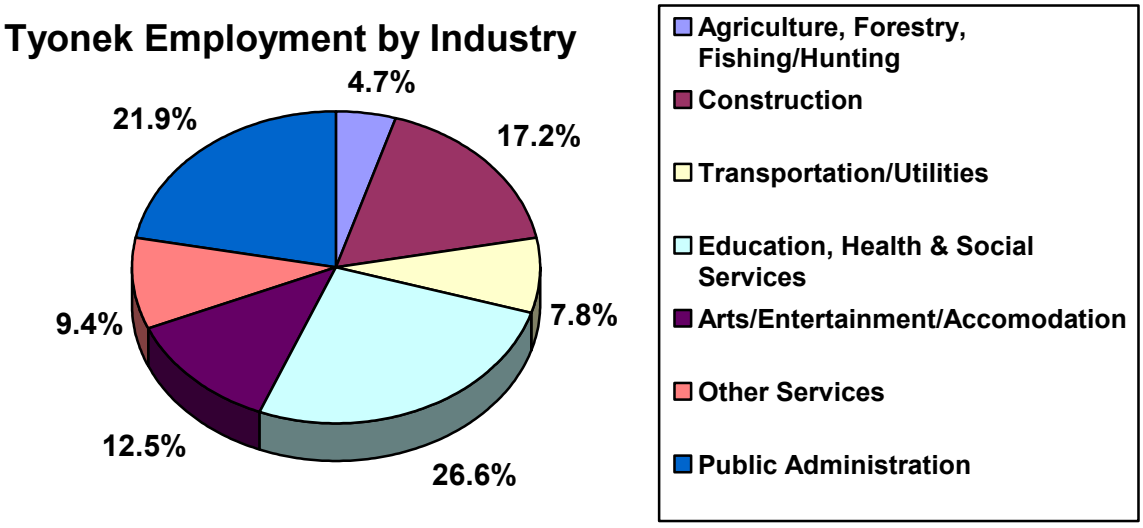


Tyonek Economic Analysis

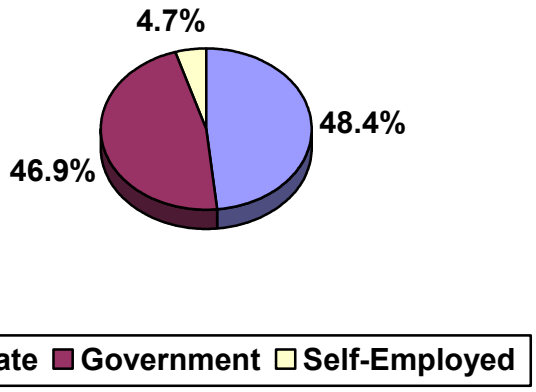
Employment

According to the 2000 Census, 38.9% of the adults over 16 years of age are not in the workforce. 16.7% of the adult population is unemployed, and after removing those not in the workforce, the unemployment rate is 27.3%





Employment by Source



Income in Tyonek

Per Capita Income (2000) = $11,261
Median Earnings = $26,250

Tyonek Household Annual Income

Less than $10,000	18.3%
$10,000 - $14,999	17.1%
$15,000 - $24,999	7.3%
$25,000 - $34,999	28.0%
$35,000 - $49,999	13.4%
$50,000 – $74,999	13.4%

Poverty Status

Families	2.1%
Individuals	13.9%
Individuals over 18	21.6%

Educational Attainment

High School Graduate or higher	70.7%
Bachelors Degree or higher	4.9%

Less than 9th grade	17.9%
9th to 12th (no diploma)	11.4%
High School graduate	56.9%
Some college (no degree)	8.9%
Graduate or Professional degree	4.9%

Population Breakdown	Number	%
Total population	**193**	**100.0**
SEX AND AGE		
Male	107	55.4
Female	86	44.6
Under 5 years	18	9.3
5 to 9 years	22	11.4
10 to 14 years	20	10.4
15 to 19 years	16	8.3
20 to 24 years	9	4.7
25 to 34 years	30	15.5
35 to 44 years	35	18.1
45 to 54 years	17	8.8
55 to 59 years	8	4.1
60 to 64 years	8	4.1
65 to 74 years	6	3.1
75 to 84 years	4	2.1
85 years and over	0	0.0
Median age (years)	28.3	(X)
18 years and over	121	62.7
Male	68	35.2
Female	53	27.5
21 years and over	114	59.1
62 years and over	13	6.7
65 years and over	10	5.2
Male	7	3.6
Female	3	1.6
RACE		
One race	193	100.0
White	9	4.7
Black or African American	0	0.0
American Indian and Alaska Native	184	95.3
Race alone or in combination with one or more other races [3]		
White	9	4.7
Black or African American	0	0.0
American Indian and Alaska Native	184	95.3
Asian	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Some other race	0	0.0

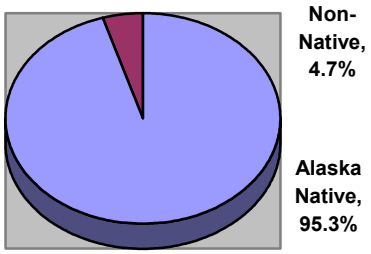
HISPANIC OR LATINO AND RACE		
Total population	**193**	**100.0**
Hispanic or Latino (of any race)	5	2.6
Mexican	0	0.0
Puerto Rican	0	0.0
Cuban	0	0.0
Other Hispanic or Latino	5	2.6
Not Hispanic or Latino	188	97.4
White alone	9	4.7
RELATIONSHIP		
Total population	**193**	**100.0**
In households	193	100.0
Householder	66	34.2
Spouse	18	9.3
Child	73	37.8
Own child under 18 years	60	31.1
Other relatives	18	9.3
Under 18 years	10	5.2
Nonrelatives	18	9.3
Unmarried partner	12	6.2
HOUSEHOLDS BY TYPE		
Total households	**66**	**100.0**
Family households (families)	45	68.2
With own children under 18 years	28	42.4
Married-couple family	18	27.3
With own children under 18 years	11	16.7
Female householder, no husband present	15	22.7
With own children under 18 years	11	16.7
Nonfamily households	21	31.8
Householder living alone	20	30.3
Householder 65 years and over	5	7.6
Households with individuals under 18 years	32	48.5
Households with individuals 65 years and over	10	15.2
Average household size	2.92	(X)
Average family size	3.42	(X)
HOUSING OCCUPANCY		
Total housing units	**134**	**100.0**
Occupied housing units	66	49.3
Vacant housing units	68	50.7
For seasonal, recreational, or occasional use	56	41.8
Homeowner vacancy rate (percent)	8.9	(X)

Rental vacancy rate (percent)	11.8	(X)
HOUSING TENURE		
Occupied housing units	**66**	**100.0**
Owner-occupied housing units	51	77.3
Renter-occupied housing units	15	22.7
Average household size of owner-occupied unit	2.96	(X)
Average household size of renter-occupied unit	2.80	(X)

Subject	Number	Percent

(X) Not applicable
[1] Other Asian alone, or two or more Asian categories.
[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.
[3] In combination with one or more other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.
Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices P1, P3, P4, P8, P9, P12, P13, P,17, P18, P19, P20, P23, P27, P28, P33, PCT5, PCT8, PCT11, PCT15, H1, H3, H4, H5, H11, and H12.

Tyonek Population by Race

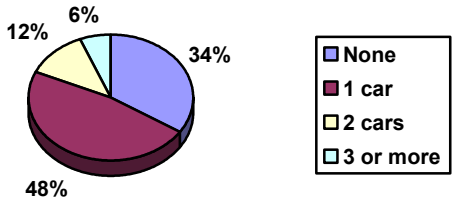


According to the 2000 U.S. Census the population of Tyonek was 193, however local experience indicates that the number tends to fluctuate during the subsistence fishing season. The population during this period increases between 30 and 50 percent.

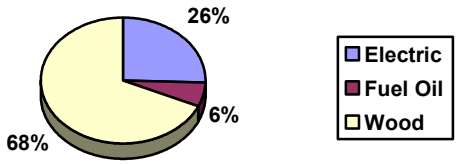
Currently the village population is between 175 and 180 but that will soon change. People leave Tyonek for various reasons but their main motivators are the lack of job opportunities within the village and lack of access to higher education.

Other Economic Indicators

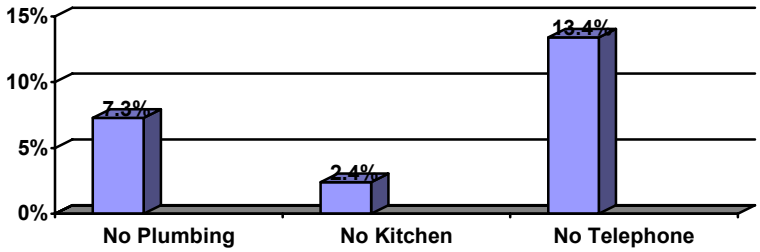
Vehicles per household



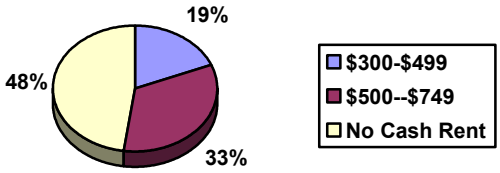
Home Heating



Home Characteristics



Average Rents - Tyonek



Natural Resources

Coal

Beluga coal field. Alaska's Beluga coal-field about 60 miles southwest of Anchorage, is believed to be the world's largest low sulfur coal-field located on year-round open tidewater with over 2 billion tons of proven reserves. The application of Hydrothermal treatment to coal from Alaska's Beluga coal-field has already been demonstrated at a pilot plant scale showing that this coal can be converted into premium, stable liquid fuel with energy levels of over 7,000 Btu/lb on a cost-effective basis.

The village corporation and council were interested in constructing an 800-foot extension to the pier to accommodate Cape Class vessels. Development of an iron carbide plant, export of coal from the Beluga coal field, and a deep water dock are currently being examined in association with development of Alaska's Beluga coal field. The Beluga coal field is located on State property and lies in between TNC and CIRI Regional Corporation Lands.

Recent plans made public by the mine developer indicate that the company no longer plans to utilize the North Foreland facility, but plans now to develop their own private port at Ladd Landing. This new development includes building a 10,000 foot trestle to accommodate large Cape Class vessels. Concerns have been raised regarding this trestle and it's potential impact on salmon and beluga whale habitat.

Chuitna Coal Project Highlights:

- Located in the Beluga Coal Field in Southcentral Alaska approximately 12 miles outside of the Native Village of Tyonek. Currently the Coal project is in its early phases. Once permitting is acquired it would offer around 300 jobs for constructing the infrastructure and transport/export center and then offer around 350 jobs in order to run the project as well as numerous service contracts. The earliest the mine is scheduled to start development is 2009 with a start of actual coal production and shipping to be between 2011 and 2012.
- The mine is expected to be able to provide housing for the 350 member workforce and include offices, mess hall and communication center. The transport/export center will be made up of a main receiving and warehouse facility, Shallow draft Bulkhead Island offshore and an upland warehouse, shop, office and fuel storage facilities. Along with the facilities there will be included a main access road, conveyor pad and service road as well as a 12 mile overhead transmission line.
- The mine is expected to produce over 300 million tons of coal with a peak production of 12 million tons per year with a minimum of 25 years of operations, expected to be open 320 days a year.
- The coal composition is 7,650 BTU/lb with 25% moisture.

- There will be 100,000 to 500,000 tons of coal storage at the dock as well as a 10,000 foot trestle to allow the 60 foot draft Cape Class Ships for loading coal.
- Total initial investment (2007 dollars) = $500 million+
- Total royalties paid to the State (25 year life) = $350 million+
- Total property tax to KPB (25 year life) = $100 million+

Timber

Tyonek Native Corporation lands are located on a narrow strip of the Coastal Trough Humid Tayga Province or the Cook Inlet Lowlands as designated by NRCS Major Land Resource Areas of Alaska, 2002. This province includes smooth and irregular plains surrounded by high mountains of the Alaska Range. Cook Inlet is level to rolling, with areas of ground moraine and stagnant ice topography, drumlin fields, eskers, and outwash plains. Most of the lowland is less than 500 ft (150 m) above sea level, with a local relief of 50-250 ft (15-80 m).

Although the climate is sub-arctic, it is less severe than the interior of Alaska, as the region is sheltered by the Alaska Range to the north. Proximity to the Gulf of Alaska makes the climate transitional to the marine climates directly south. Average annual temperatures range from 32 to 39 degrees Fahrenheit (0 to 4C), with a winter average of about 5F (-15C) and summer maximums of about 64F (18C). Average annual precipitation ranges from 10 to 18 in (260 to 460 mm). Annual snowfall averages from 4 to 10 in (100 to 260 mm).

Throughout the Cook Inlet lowlands, lowland spruce-hardwood forests are abundant. Bottom land spruce-poplar forest adjoin the larger river drainages, along with thickets of alder and willow. Wet tundra communities exist along the Cook Inlet coastline. Spodosols are the principal upland soils in the Cook Inlet. The principal vegetation of the upland forest on the TNC property is white spruce, paper birch and quaking aspen. Cottonwood is found in some upland stands but primarily occurs in areas bordering the principal streams. Black spruce is dominant in the wetter areas. Muskegs are treeless or support stunted black spruce. Open under story and wet meadow lands contain bluejoint reedgrass – an invader of open forest stands. Early succession forest stages fully stocked with natural regeneration of hardwoods and willow patches are highly productive moose habitat in all seasons.

Forest Management Practices

Based on the history of development in the Tyonek area the current forest is probably the result of historic harvesting for building materials and fire wood. In recent history prior to spruce harvest only small patch cutting has occurred. The forest that now occurs on Tyonek outside of the recent harvest is 60+ years old and fully mature. Although there was a small lumber mill, primary logging occurred off of the property with only small patches harvested on

the property. No major fires have occurred in this century. Recent primary disturbance prior to recent logging has been road building, seismic exploration, and natural gas development. There is a road infrastructure as well as numerous well pads for gas. Currently, the wells and pads are being refurbished. The entire area was cruised and inventoried from 1988-1990. Timber market conditions precluded economic harvesting in the mid 90's even though the area was under contract. A second contract was let in 1999 which was completed in 2003 with an estimated 11,036 acres harvested.

The spruce forest component was recognized to be under attack from bark beetle during the cruise of the late 1980's. Mortality was high in some stands while others were only recently infected. The goal was to capture the value of the spruce while keeping an intact forest for habitat and future regeneration. The harvest prescription was to take all merchantable white spruce from upland stands whether infected with spruce bark beetle or not. The contractor protected hardwoods, spruce saplings and poles. Since stands were mixed spruce hardwood with variable stocking rates and mixtures of species results varied but most stands ended essentially fully stocked with hardwood based on forest practices criteria and small patches of spruce regeneration.

Harvest units were logged both in the summer and winter. Summer harvest units were located on well-drained sites and those accessed by road system. Winter sites were usually the wetter sites or remote areas where winter (frozen) haul roads could be constructed. Spruce timber was tree length skidded. The operator used mechanical feller bunchers, grapple skidders, forwarders and tree length processors. Limbs and tops were skidded to landings and resulting slash piles were burned.

Stand surveys. Stand surveys were conducted by a contract forester (Sanders 2003) in the fall of 2003 to determine the amount of regeneration and the need for scarification of soils prior to the final departure of the logging contractors. A stand depletion map was constructed which depicted location, shape and time of harvest for each of the harvest units. Within stand regeneration surveys were conducted as well and a table listing results was developed.

Approximately 6,687 acres within the harvested stands has been exempted from regeneration standards based on residual stocking and from spruce mortality exemptions. At present, 4,349 acres have not received written verification of reforestation by DNR. Sanders (2003) believes that the remaining 3,550 acres will qualify as fully stocked under the Alaska Forest Resources and Practices Act standards (AFR&PA). Some additional surveys and a tour by a Department of Natural Resources (DNR) forester may be necessary to complete the DNR documentation process.

Although the harvest units appear to meet AFR&PA guidelines for post harvest stocking, little new regeneration has occurred. Most stands are completely

covered with bluestem joint grass where harvest has occurred. This grass has the ability to significantly restrict sprouting of seeds and competes and shades out seedlings. Moose do not forage on this grass. Thus, from an AFR&PA regulatory perspective, the forest stands (post harvest) meet residual stocking guidelines. From the perspective of increasing the quality of moose habitat, the stands are in very poor condition.

Status of Moose Habitat and Populations

Browse surveys. Fifteen browse survey lines of 1000m each throughout the harvest area were initiated to empirically determine the extent of available browse and determine amount of browsing occurring. However, after conducting several survey lines in various harvest units we found that such a very small amount of hardwood regeneration had occurred and had only a negligible amount of browse activity. A decision was made that an empirically based survey would be fruitless in yielding any useful information. Survey time was spent visiting more harvest units and making qualitative visual estimates across broader area. Visual estimates of canopy cover, bluestem jointgrass cover, hardwood browse available were taken by walking through a sub set of the harvest units harvested in winter and summer and in each of the years of harvest. Scarification could not be estimated on stands harvest more than one year previously because of the complete coverage of bluestem joint grass.

All harvested stands are essentially covered with bluestem jointgrass which increases in density each year post harvest. Maximum density within a harvested stand or complete coverage of the site by bluestem occurs in year three to four years post harvest.

Unharvested forest stands show historic browsing with a low to moderate density of browse. These stands would benefit from activities to stimulate browse rejuvenation. With management, the habitat could support 10 times more moose than currently occurs in Unit 16b. (Dr. Wayne Reglin, ADF&G)

1992 Total Estimated Commercial Timber Volume Kenai Peninsula Borough						
	Chugach NF	**Borough**	**State**	**Native**	**Other Private**	**Total**
North Pen.		40	20	40	9	109
Central Pen.		89	311	330	40	770
South Pen.		70	354	230	50	704
Chugach N.	241	6	2		5	254
Chugach S.	400	26	8	40	10	484
Kachmemak						0
S-PG-EB				354	90	444
Pen Sub Total	**641**	**231**	**695**	**994**	**204**	**2765**
Kalgin			25			25

Tyonek		24	75	224	3	326
Polly Creek				195		195
Red GI				180		180
Iniskin				159		159
West Sub Total		**24**	**100**	**758**	**3**	**885**
Total	**641**	**255**	**795**	**1752**	**207**	**3650**

Fishing

Tyonek is a subsistence community with an active commercial fishery, but in recent years the fish population has been declining. As a result the villagers are no longer able to support themselves solely on commercial fishing because of the low fish count and the lack of fish processors.

According to Community Database Online, 20 residents held fishing permits in 2000, and that number has since declined to 15 permit holders. Part of the reason people have sold their permits is due to expenses. Fishermen spend more money buying and maintaining their equipment than they make fishing.

There has been considerable progress made in the effort to develop Tyonek Seafood Cooperative (TC), which could substantially improve the economic opportunities related to commercial fishing and processing. The Co-op members want to continue building markets for Tyonek fish and fish products, maximize the price its members receive for their salmon, and reduce their costs. More detailed information regarding this effort can be found in Attachment 1.

Recreational guided fishing has been an emerging economic opportunity in Tyonek. Tyonek Native Corporation operates a lodge facility in the community, and this is further explored in the Tourism section of this plan.

Oil & Gas

Tyonek lands were first leased for exploration in the mid 1960's with gas well drilling occurring in the 1970's and 1980's. A number of wells were drilled and the property was crisscrossed with seismic exploration lines. These seismic lines created early succession forest and enhanced moose habitat on a small acreage. A road system and well pads were developed. The primary impact from the development of this infrastructure was the increase in easy access for hunting rather than a habitat impact. With greater access and a higher population due to the town of Beluga greater harvest occurred on the moose population.

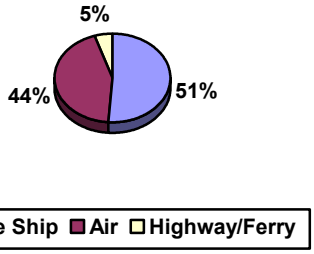
A renewed interest in the gas wells due to higher prices and a reduced local supply has lead to a program of refurbishing the well and putting them back online. This will increase development and road activity but will not have any significant additional impact on habitat quality.

Tourism

Alaska's tourism industry is a vital part of the state's economic diversification. The value of the tourism industry is estimated to contribute $1.6 billion annually, and provides over 26,000 direct jobs valued at $579 million in wages and salaries. Indirect impact of the tourism industry is even more substantial, supporting almost 40,000 jobs and an estimated $1.15 billion in salaries and wages.

In 2006, the average age of a visitor to Alaska was 58, and 31% are repeat visitors. The average length of stay is 10.7 days. The total number of visitors to Alaska in 2006/2007 (summer and winter visits) is estimated at 1,881,000, of which 1,630,000 visited between May and September. This is a slight increase from 2005/2006 which reported 1,875,200 total visitors (1,530,000 summer visits).

Method of Travel 2006-2007

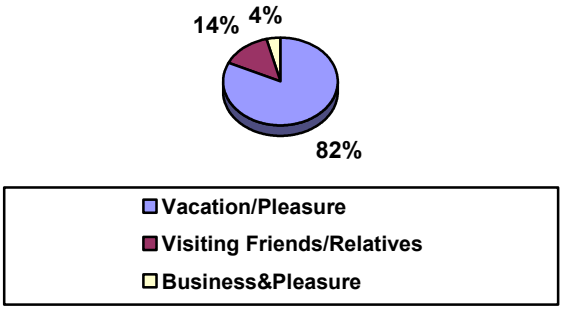


Rural Tourism

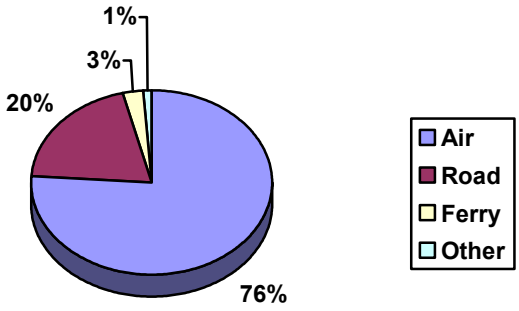
Since Tyonek is a small community located off of the road system, it is most relevant to look at the McDowell Group Report ("Profile of Visitors to Rural Alaska", March 2006) which looks specifically at rural tourism numbers and the characteristics of the rural tourist. The intent of this section is to explore the rural tourism industry, the potential competitors for rural tourism, and to understand the target market for possible tourism development in Tyonek.

The numbers from this study focus on data collected in 2005, and focuses on tourism data from communities off the road system, or on the road system with a population of less than 1,600.

Rural Visitors - Purpose

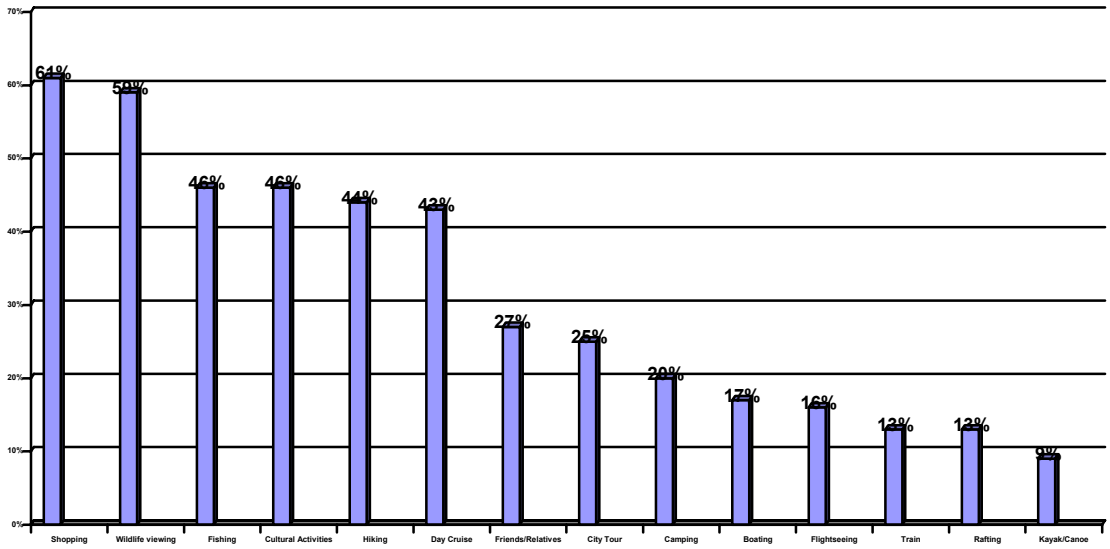


Mode of Entry



- Rural Visitors stayed longer than the average tourists, staying for an average of 12.5 nights.
- 53% of rural visitors stayed in a hotel or motel
- 28% stayed in a lodge or resort
- 12% stayed in a bed and breakfast
- The average rural visitor spent $1,767 while in Alaska, not including transportation (urban visitors spent an average of $984)
- The average party spent $4,157 while visiting
- 58% of rural visitors had been to Alaska before
- 61% of rural tourists said they were “very likely” to return to Alaska, and 22% said that a return visit was “likely”
- 45% of rural visitors originated from the Western U.S. (Washington, Oregon or California), and 15% were international
- Rural visitor profile
  - Most likely to be male (59%)
  - Average age: 50.1 years of age
  - Average party size: 2.7 people
  - Mean annual income: $91,200

Rural Tourism Activity



Tourism Development in Tyonek

Tourism development in Tyonek has historically mirrored these rural trends, with the majority of tourism development focused on fishing lodges and guided fishing packages. Recreational hunting and fishing have had numerous impacts on the local residents, both positive and negative. Positive impacts are largely felt by local businesses providing supplies or services to recreational visitors. Negative impacts are primarily focused on trespass by recreational fishermen and hunters on private property, including Native Allotments and on Tyonek Native Corporation lands. Tyonek's close proximity to Anchorage has contributed to both the development opportunity and the frequency of the negative impacts.

Future tourism development in Tyonek is most likely to focus on the following niche markets:

- Wildlife Viewing
- Fishing
- Cultural Activities
- Adventure tourism

All tourism development should take into account the following:

- Infrastructure – accommodations, transportation, services
- Anchor attraction development – tourism "product" development
- Access to market

Community Development

Infrastructure

The Native Village of Tyonek has a piped water and sewer system serves the entire community -- approximately 90 homes and facilities. Water is derived from Second Lake, is treated and stored in a 175,000 gallon tank. Back-up water supplies are available from a lake near the airport. The community wants to develop a groundwater source. A small coin-operated washeteria, with one washer and dryer, is available.

The Village has been working with the Alaska Native Tribal Health Consortium over the past four years to develop the following water/sewer improvements:

- Construct a Temporary Water Treatment Plant
- Locate and Install 2ea Groundwater Wells (150 ft and 238-ft deep)
- Install Well Pump Control, Radio Controlled System to Prevent WST Overflow
- 7,200 Linear Feet of new 6-inch HDPE Water Main
- 5,400 Linear Feet of new 1-inch HDPE Water Service Line (68 Services)
- 6 6-inch Isolation Valves
- 6 Water Valve Vault
- Re-install 14 Existing Water Main Flush Hydrants
- Install 2 New Water Main Flush Hydrants
- Install 4 new Water Main Flush Hydrants in Indian Creek Sub-Division
- Repair and upgrade 500-LF of Ocean Outfall
- Install New Fittings on Outfall to Allow Pressure Discharge
- Re-install Terminal Sewer Manhole to Re-establish Correct Grade
- Install 9 New Gravity Sewer Systems (approx 1200-LF)
- Install 1 E-One Residential Lift Station Unit.
-

Projects currently in planning for 2008 and 2009:

- 1500-SF Water Treatment Plant
- 500-SF Septic Drain Field
- 6,000-Gallon backwash lagoon
- 3,500-LF of new 6-inch HDPE Water Main
- 500-LF of Raw Water Transmission Line
- 212,000-Gallon Steel, Bolted Water Storage Tank

The Village Council operates both the water and sewer collection. Chugach Electric Association is the electric utility used in Tyonek.

Telephone service is provided by Matanuska Telephone Association (Palmer) for in state calls and AT&T Alascom for out of state calls. Local television stations include KYES and KAKM which are broadcast from Anchorage. Radio stations include all Anchorage stations, KSRM-AM and KWHQ-FM.

Internet access is provided by Yukon Telephone Company, which provides broadband connections in the community.

Health care services in Tyonek include the Indian Creek Health Clinic, which needs major renovations. Tyonek is defined as an isolated village, emergency services are only available by air access with the exception of volunteers and a health aide.

Local services and facilities include Tyonek Volunteer Rescue Squad which provides fire and rescue, as Tyonek is a Project Code Red® community. Law enforcement is provided by the Alaska State Troopers from the Girdwood station. There is a Boys and Girls Club that meets as well as a community hall and a school/community library.

Education

The only school facility in Tyonek is the Tebughna School, which is a K-12 school. Tebughna School has an average enrollment of 50 students. Vocational and higher education are only available remotely via the internet. Tribal Child Care Technical Assistance Center through the Cook Inlet Tribal Council provides some federal programs and services.

Transportation

The village is not accessible by road system. Permission is required to land at the local 3,000' long by 90' wide gravel airstrip, owned by the Village of Tyonek, although regularly-scheduled flights are available through charter services based out of Merrill Field in Anchorage. A State-owned 4,003' gravel airstrip is available at Nikolai Creek, and a 2,400' gravel airstrip, owned by Arco Alaska, is located at Beluga.

The local road system is primarily dirt and gravel roads maintained by Tyonek Contractors, a subsidiary of Tyonek Native Corporation. The local road system connects to nearby Beluga and Shirleyville. Barges deliver heavy goods to the village.

Situated on the west side of Cook Inlet in Tyonek, the North Foreland Barge Facility is a joint venture between Alaska Village Initiatives and Tyonek Native Corporation. The project was designed to create new jobs, provide barge-landing services for the timber, gravel, and coal mining industries in Southcentral Alaska.

As South-Central Alaska natural gas supplies continue to shrink, this area becomes more attractive as the premier alternative coal fired power generation site for Alaska's largest population centers.

Currently there are 9 business licenses in Tyonek listed with the State of Alaska.

Business Name	SIC Codes (Primary - Secondary)
ALASKA OILFIELD CONTRACTORS	532412
ALASKA OILFIELD CONTRACTORS, INC	532490
BJS ENTERPRISES	561790 4900
BRITTANY'S ICE CREAM	722211
JUDY'S DAYCARE	624410
JUSTIN TIME GENERAL STORE	452990 445110
NATIVE VILLAGE OF TYONEK	722211 5800
NATIVE VILLAGE OF TYONEK	921190
TEBUGHNA SUNSET LIQUOR STORE	445310

Capital Projects and Grants – State of Alaska RAPIDS database

Lead Agency	Fiscal Year	Project Status	Project Description	Project Stage	Agency Cost	Total Cost
DCCED	2008	Funded	New Emergency Fire Truck - Legislative Grant - Grants to Municipalities	Preliminary	$45,000	$45,000
DCCED	2008	Funded	Tyonek School Books and Supplies - Legislative Grant - Grants to Municipalities	Preliminary	$5,000	$5,000
HUD	2006	Funded	Indian Housing Block Grant - NAHASDA administration,	Preliminary	$124,282	$124,282

			operating & construction funds			
ANTHC	2005	Funded	Water Distribution System Replacement	Preliminary	$0	$1,947,500
BIA	2002	Funded	Grade & Drain Roads, Airport Runway	Preliminary	$1,150,000	$1,150,000
BIA	2002	Funded	Bridge Project	Preliminary	$32,500	$32,500
HUD	2006	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Contract	$123,799	$123,799
ANTHC	2002	Funded	Well Test Pumping & Pilot Filter Study - DEC $25.0 FED $75.0 Assess water source.	Design	$0	$100,000
HUD	2005	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Construction	$117,008	$117,008
ANTHC	2003	Funded	Water Treatment & Wastewater Disposal Improvements - ANTHC lead. EPA $449.5, USDA/RD $956.7 DEC $468.8 Construct water	Construction	$0	$1,875,000

			treatment plant and well, upgrade water tank, water system, service lines and outfall. Purchase pump truck.			
Denali	2005	Funded	Rural Teacher Housing - Other Funding = Kenai Peninsula Borough: $483,672. Kenai Peninsula Borough – In Tyonek, new construction of one stick built duplex. Utilities to be provided by community.	Completed	$235,000	$718,672
HUD	2004	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Completed	$126,789	$126,789
ANTHC	2003	Funded	Water and Sewer - IHS Housing. Service connections for 10 homes.	Completed	$0	$150,000
HUD	2003	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Completed	$146,159	$146,159

HUD	2002	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Completed	$127,429	$127,429
HUD	2001	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Completed	$127,489	$127,489
HUD	2000	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Completed	$115,049	$115,049
HUD	1999	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Completed	$119,798	$119,798
HUD	1998	Funded	Indian Housing Block Grant - NAHASDA administration, operating & construction funds	Completed	$129,135	$129,135
ANTHC	1997	Funded	Water & Sewer Planning & Feasibility Study - IHS funding; DEC $67.5	Completed	$0	$67,500

DCCED	1994	Funded	Cat D8 Tractor/Dozer - Legislative Grant	Completed	$85,000	$85,000
DCCED	1993	Funded	Heavy Equipment Purchase - Legislative Grant	Completed	$47,368	$47,368
HUD/CGP	1993	Funded	Housing Modernization - Major renovations - 14 units	Completed	$314,794	$314,794
ANTHC	1993	Funded	Water & Sewer, Ph III - IHS project	Completed	$0	$42,900
DCCED	1992	Funded	Youth Recreation Facility - Legislative Grant	Completed	$25,000	$25,000
ANTHC	1991	Funded	Water & Sewer, Ph III - IHS project; DEC $742.0. Construct Sewer to 27 Homes in Indian Creek Subdivision	Completed	$0	$742,000
ANTHC	1985	Funded	Water/Sewer - IHS project; DEC $42.9. Construct sewer service lines to replace septic systems for 27 houses in the Inidan Creek Sub.	Completed	$0	$42,900
N/A		Potential	North Foreland Port Development to Panamax	N/A	$0	$0

			Class for Bulk Commodities and Natural Gas Export			
N/A		Potential	Road and Airstrip Repair	N/A	$0	$2,500,000

Section IV

Community Goals & Priorities

Native Village of Tyonek
Economic Development Community Meeting
December 19, 2007

Keeping our Community

In order to plan for Tyonek's future, the participants of the community meeting were asked the following questions:

"Why do you live in Tyonek?"

"What do you like about your community"

The purpose of this exercise was for the participants to keep in mind what characteristics of Tyonek are important to them, so that in growing their community and planning projects, they are still building a community that fits their needs and lifestyle. Establishing these criteria help set the "destination" when planning for community growth.

- Lack of traffic
- It's home
- Small town - "everyone knows your name"
- Freedom- founding statutes of Tyonek and self governance
- Subsistence
- Healthy lifestyle
- Peace and quiet
- Kids can run free - safely
- Native population

A Vision of Tyonek

The group was asked to envision Tyonek 5, 10, or even 15 years in the future. All restrictions and obstacles were removed – the group was encouraged to list all things, tangible and intangible, that they would like to see in their ideal future.

- Fully functional year round fish processing plant
- Ferry System
- Fully funded Culture Camp
- Hardware, Department, Grocery, Wholesale Store
- Fuel Depot/Bulk Fuel Facility
- Kids in school, fully open, education system and Adult Learning
- "Village Character" stay the same
- Tribal laws in place and enforced including ordinances
- Strengthened Council
- Healthy community (mental, physical and spiritual)
- Tribal Court
- Animal Shelter/Control/ Vet Clinic
- Education Cultural Center
- Bring back Native Spirituality
- Elder Retirement Home/Hospital
- Paid fire and police station
- Trade/Vocation School
- Full Recreation Facility including Trails, Track and Field, Aerobics, Dance, Gym
- Land security strengthened and enforced
- Mental Health Plan/Services

- Health Clinic and Treatment Center for drug and alcohol
- Water Treatment Plant
- Housing for every adult member
- Land Reconveyance completed
- Village contracting company doing local work and working with oil fields, etc.
- Self sustaining village
    - Run village without grants
- Bigger Boys and Girl's Club
- Village Charter service "Tebughna Airlines"
- Some Tourism (limited) with a lodge or resort on the other side of Nakacheba, snow-machining, ATV, mud bogging, horseback riding, cultural craft classes and Helicopter flight seeing trips (all outside of village)
- Wind Energy Development
- Dust conditions and roads under control
- Biomass heating system
- Untouched, pristine waters
- Buildings for each department within NVT
- Greenhouse with medicinal and traditional plants
- Beach erosion control
- Café/ Bar/ Liquor store with traditional native foods on the other side of the river
- Enclosed refuse system and landfill
- Lumber retail for houses and firewood
- More Moose
- More salmon for subsistence and commercial fishing in Tyonek

- More Beluga Whales
- Strong Healthy Berry season
- Traditional Healer in the village
- Full Service Auto Shop
- Functional fishery co-op for dividends and resource to community and help for fishermen
- Equality among generations in village and regional corporation and the ability to share deeds
- Paved hiking trails and bike trails
- Archery and shooting classes
- More Sports for youth

Economic Development

Projects indentified in the previous step were categorized so that like projects could be compared and ranked in priority order. Following are the projects – ranked and unranked – from the list of economic development projects.

Top Priorities

1. Village Construction Company
2. Fish processing plant and Co-op

Unranked projects (in no particular order)

- Ferry
- Fuel Depot/Bulk Fuel Facility
- Stores (wholesale, grocery, department, etc.)
- Charter
- Tourism
- Café/Bar/Liquor store
- Lumber retail
- Wind/Biomass/Solar
- Auto Shop
- Cultural Craft classes
- Taxi Service

Community Development

Top Priorities

1) Land Re-conveyance
2) Tied for second:
   - Strengthen Council
   - Animal Shelter/Control and Veterinarian Clinic
   - Land Security
   - Bigger Boys and Girls Club

Unranked projects (in no particular order)

- Tribal Courts
- Culture Camp and Educational Culture Center
- Elder retirement home
- Fire and Police Station
- Daycare
- Recreation Center
- Housing for every adult
- Water Treatment Plant
- Green house
- Refuse/Landfill

Health Issues/Projects

Top Priorities

1. Clean Waters
2. Tied for 2nd
    - Fitness Program
    - Dental Clinic
    - Diabetes and Cancer center

Unranked projects (in no particular order)

- Mental, Physical and Spiritually healthy community
- Elder Hospital
- Health Clinic and more personnel
- Treatment Center (drug and alcohol)
- Medicinal and Traditional plants
- Traditional Healer
- Nutrition Education
- Eye Clinic
- Mental Health Plan Services
- Indoor Pollution control

Education Projects

Top Priorities

1. Trade/Vocation School
2. More Sports for Youth
3. Tied for 3rd
    - Archery Class
    - Music

Unranked projects (in no particular order)

- School open and fully attended
- Adult Learning
- Dance
- Aerobics

Transportation Development

In this category, two projects tied for first. They were left as sharing the top priority due to the fact that the projects were considered to be related.

Top Priorities

- More equipment for maintenance and building
- Dust Control

Unranked projects (in no particular order)

- Transportation Business Plan
- Trails
- Ferry

Environmental Issues

Top Priorities

1. More Salmon/protect salmon habitat
2. More Moose

Unranked projects (in no particular order)

- Clean Waters
- Erosion Control
- More Beluga Whales

Project: _Land Reconveyance_____

Team Leader: _NVT Land Committee_____

	1 month	3 months	6-9 months	12 months
Task: Re-establish Land Committee Who: President, Council Resources: Council, Past Council Members, Tribal Members	○ Name NVT Members to Committee ○ Recruit members from community	○ Complete initial meeting ○ Review Plan ○ Set Committee Goals		
Task: Education & Training for committee Who: Appointed team from committee Resources: Training consultants	○ Appoint members to attend training	Identify Costs & method for training	○ Training Completed ○ Review & Revise workplan	
Task: Research & mapping (concurrent to task 2) Who: Land Committee Resources: TNC, Geri Simon, Jerry R. AVI, consultants, Village members, BLM, DNR	Appoint remaining committee members to research	3-6 months: complete and present to Committee, Council		
Task: Educate Community & Tribal members (Subsequent to Tasks 1&2) Who: Land Committee Resources:	Set Agenda & discuss materials to present	○ Set Date ○ Advertise ○ Prepare materials	4-6 months: Hold Meeting	

Sources

Alaska Department of Commerce, Community and Economic Development Community Database Online

Alaska Department of Fish and Game

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TYONEK AREA FRESH SEAFOOD PROGRAM

2006 SEASON REVIEW

Synopsis

Approximately 27,600 pounds of fresh Chinook, Sockeye and Coho Salmon were caught by fishermen participating in the 2006 Tyonek Area Fresh Seafood Program. Approximately 7500 pounds were delivered in the "round". Otherwise, 16,000 were delivered gutted and gilled to reduce shipping weight. The value of this year's catch was worth approximately $50,000. Eight thousand dollars ($8,000) was paid out in transportation costs and the community of Tyonek received $2,400 in the Program Sustainability Fund towards next year's expenses. Nearly $40,000 was paid directly to the permit holders for their efforts. The amount paid directly to the permit holders represents a 24% increase in income over the success of this program in 2005.

Fishing Days

Between May 30 and the end of the funded program on August 31, a total of 15 fishing days were open by ADF&G. Fishing occurred on 12 (80%) of the scheduled fishing days. Expected low Sockeye counts on the Yenta River prompted closures by emergency order from ADF&G for 8 periods during the peak of the lucrative sockeye run. September 01 brought the opening of moose hunting which essentially ended commercial fishing for the year. An unusually early and strong run of Coho showed up at the end of June but unfortunately there was no market for them.

Program Weights

The gross round weight is estimated at 27,600 pounds of Chinook, Sockeye and Coho Salmon. Similar to 2005, more fish than just those handled in this program were caught by Tyonek fishermen and sold to other buyers. For the most part, these additional salmon

sessions were given on the program quality standards. For the majority of the participants, the quality standards were reasonably met. As in 2005, the project management worked closely with the buyers of the salmon to identify sub-standard quality and to correct the problem quickly.

Availability and distribution of ice was often a concern and had the greatest impact on the quality of the salmon. The icemaker purchased for Tyonek Fisheries produces 800 pounds of ice in a 24 hour period. The fishermen took on the roll of retrieving their own ice prior to fishing. No mechanical problems arose with the icemaker.

Cleaning and sanitizing of the coolers was usually done the day after fishing occurred. Although the program had no local coordinator the Village Administration pitched in with their staff of summer youth workers to make sure the coolers were cleaned and topped off with ice.

Management Services

In addition to developing, implementing and managing the fresh seafood program, Reeve Transport handled the majority of accounting services for transportation and program equipment, held seafood and ice in its Anchorage cooler facility, cleaned and returned transport coolers and boxes to Tyonek, flew equipment and product as needed. Assets of Reeve Transport used in this project included an aircraft, one-ton flat bed delivery truck, warehouse and commercial cooler space. 30-40 hours a week were put in to manage this program.

Seafood Transport

Reeve Transport made every effort to minimize the cost of transporting the program seafood.

- On the product side; all ice and excess water was to be removed from the coolers to only ship the weight of the salmon and the 25 pound cooler. On average, 30 pounds of ice and water was removed from a cooler received at the Tyonek Airport. The iced salmon remained cool and were either delivered directly to FAVCO or immediately placed in Reeve's Anchorage cooler. This act reduced the potential shipping cost by $.055 per pound of salmon product sold.

were sold to an area tender during the Chinook season. The volumes of these fish are unknown but the concept of additional permit holders and their catch should be considered in the future operation of this program. As predicted in 2005, more fishermen participated in the Tyonek Fisheries program in 2006.

Program Income and Expenses

The estimated value of the overall catch (program income) was $50,000

Average prices for premium grade live-bled, iced and gutted salmon were;

	2006	**2005**
Chinook	$4.25 per pound (Round)	$2.70 per pound
Sockeye	$1.65 per pound	$1.70 per pound
Coho	$1.20 per pound	$1.10 per pound

Ten cents ($.10) for each pound of salmon that the permit holders were paid for went directly into the Tyonek Fisheries Sustainability Fund. The amount paid into this fund for the 2006 season is $2,363. The project target for the 2006 fund was a $5,000. The Village Council opted to maintain the $.10 per pound rather than raise it to the suggested $.15-.20.

The shipping cost was raised from $.25 to $.35 for 2006. Shipping to Anchorage was paid for by reducing the amount the fishermen were paid. Shipping costs paid to a variety of air carriers totaled $8,270. Every effort to minimize the shipping weight was made by removing ice and water prior to loading the catch on aircraft. To reduce wear on the transport coolers, fish boxes were recycled from the Port Heiden Area Program and used 2-3 times hauling fish from Tyonek. To further minimize program expenses, empty transport coolers and fish boxes were returned to Tyonek on the project manager's plane or on chartered flights arriving to pick up a load of program seafood.

Quality Assurance

Permit holders that participated in the program were required to attend a quality-training seminar and adhere to the program's quality control requirements throughout the season. Most of the participating fishermen did attend. Many additional individual training

Future

Management of the still developing Tyonek Fisheries is necessary to ensure continued quality assurance and assist in the marketing and delivery of Tyonek's salmon. When the region is able to fish a normal Sockeye return in addition to Chinook and Coho, program volumes should be upwards of 40,000 pounds. Fresh salmon prices continue to remain strong and the local fishermen will continue to benefit from their quality training and market exposure.

2005 TYONEK AREA FRESH SEAFOOD PROGRAM

End of Season Review

Date	Est. Round Weight	Pounds Sold	Est. Max. Value$	Transportation	Sustainability Fund	Est. Fishermens' Net Pay
30-May	602	502	$1,406	-125.50	-50.20	$1,230
6-Jun	2990	2492	$6,978	-623.00	-249.20	$6,105
13-Jun	1277	1064	$2,979	-266.00	-106.40	$2,607
20-Jun	133	111	$311	-27.75	-11.10	$272
23-Jun	0	0	$0	0.00	0.00	$0
27-Jun	3526	2938	$4,995	-734.50	-293.80	$3,966
30-Jun	3665	3054	$5,192	-763.50	-305.40	$4,123
4-Jul	2526	2105	$3,579	-526.25	-210.50	$2,842
7-Jul	806	672	$1,142	-168.00	-67.20	$907
11-Jul	0	0	$0	0.00	0.00	$0
14-Jul	1802	1502	$2,553	-375.50	-150.20	$2,028
18-Jul	2288	1907	$3,242	-476.75	-190.70	$2,574
21-Jul	0	0	$0	0.00	0.00	$0
25-Jul	0	0	$0	0.00	0.00	$0
28-Jul	0	0	$0	0.00	0.00	$0
1-Aug	0	0	$0	0.00	0.00	$0
4-Aug	0	0	$0	0.00	0.00	$0
8-Aug	3551	2959	$3,107	-739.75	-295.90	$2,071
11-Aug	5153	4294	$4,509	-1,073.50	-429.40	$3,006
15-Aug	0	0	$0	0.00	0.00	$0
18-Aug	679	566	$679	-141.50	-56.60	$481
22-Aug	0	0	$0	0.00	0.00	$0
25-Aug	0	0	$0	0.00	0.00	$0
29-Aug	0	0	$0	0.00	0.00	$0
1-Sep	0	0	$0	0.00	0.00	$0
5-Sep	0	0	$0	0.00	0.00	$0
8-Sep	0	0	$0	0.00	0.00	$0
12-Sep	0	0	$0	0.00	0.00	$0
15-Sep	0	0	$0	0.00	0.00	$0
19-Sep	0	0	$0	0.00	0.00	$0
22-Sep	0	0	$0	0.00	0.00	$0
26-Sep	0	0	$0	0.00	0.00	$0
29-Sep	0	0	$0	0.00	0.00	$0
Totals	**28999**	**24166**	**$40,671**	**-$6,042**	**-$2,417**	**$32,213**
	Est. Round Weight	**Pounds Sold**	**Est. Max. Value$**	**Transportation**	**Sustainability Fund**	**Est. Fishermens' Net Pay**

2006 TYONEK AREA FRESH SEAFOOD PROGRAM

Season Review

Date	Round Weight	Pounds Sold	Max. Value$	Transportation	Sustainability Fund	Est. Fishermens' Net Pay
29-May	797	797	$3,746	-278.95	-79.70	$3,387
5-Jun	2330	2330	$10,951	-815.50	-233.00	$9,903
12-Jun	4526	4526	$14,483	-1,584.10	-452.60	$12,447
26-Jun	764	664	$1,506	-232.40	-66.40	$1,208
29-Jun	NO REDS NO KINGS		$0	0.00	0.00	$0
3-Jul	NO REDS NO KINGS		$0	0.00	0.00	$0
6-Jul	NO REDS NO KINGS		$0	0.00	0.00	$0
10-Jul	CLOSED ADF&G		$0	0.00	0.00	$0
13-Jul	CLOSED ADF&G		$0	0.00	0.00	$0
17-Jul	CLOSED ADF&G		$0	0.00	0.00	$0
20-Jul	CLOSED ADF&G		$0	0.00	0.00	$0
24-Jul	CLOSED ADF&G		$0	0.00	0.00	$0
27-Jul	CLOSED ADF&G		$0	0.00	0.00	$0
31-Jul	CLOSED ADF&G		$0	0.00	0.00	$0
3-Aug	CLOSED ADF&G		$0	0.00	0.00	$0
7-Aug	4372	3802	$5,513	-1,330.70	-380.20	$3,802
10-Aug	3554	2962	$3,793	-1,036.70	-296.20	$2,460
14-Aug	2777	2314	$2,882	-809.90	-231.40	$1,841
17-Aug	2526	2105	$2,624	-736.75	-210.50	$1,677
21-Aug	2335	1946	$2,369	-681.10	-194.60	$1,493
24-Aug	2430	1192	$1,485	-417.20	-119.20	$948
28-Aug	892	743	$957	-260.05	-74.30	$622
31-Aug	298	248	$288	-86.80	-24.80	$176
4-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
7-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
11-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
14-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
18-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
21-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
25-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
28-Sep	SUBSISTSANCE HUNTING		$0	0.00	0.00	
Totals	**27600**	**23629**	**$50,596**	**-$8,270**	**-$2,363**	**$39,963**
	Round Weight	**Pounds Sold**	**Max. Value$**	**Transportation**	**Sustainability**	**Est. Fishermens'**

Situational Report: Tyonek Seafood Coop

Overview

The Tyonek Seafood (TC) Coop is located in Tyonek on the northwest shore of Cook Inlet, 43 miles southwest of Anchorage. There are no fish processors operating on the West side of Cook Inlet, and few fish buyers. The co-op began as a pilot project to see if new markets could be developed and price increased for Tyonek's fish. The pilot project was successful. The TS coop project improved fish quality, developed market for its members' fresh, live caught salmon to processors in Anchorage or on the Kenai Peninsula, and raised its members' income, but at the end of its initial grants the program's organizers lost interest. The co-op members want to continue building markets, maximize the price its members receive for their salmon and reducing their costs. The coop has potential to expand given that there are no processors on the West side of Cook Inlet and that while 20 residents of Tyonek hold commercial fishing permits only a few are fished.

Background

Tyonek is a Dena'ina (Tanaina) Athabascan Indian village on the western shore of Cook Inlet. The Alaska Commercial Company had a major outpost in Tyonek by 1875. In 1880, "Tyonok" station and village, believed to be two separate communities, had a total of 117 residents, including 109 Athabascans, 6 "creoles" and 2 whites. After gold was discovered at Resurrection Creek in the 1880s, Tyonek became a major disembarkment point for goods and people. A saltery was established in 1896 at the mouth of the Chuitna River north of Tyonek. In 1915, the Tyonek Reservation (also known as Moquawkie Indian Reservation) was established. The devastating influenza epidemic of 1918-19 left few survivors among the Athabascans. The village was moved to its present location atop a bluff when the old site flooded in the early 1930s. The population declined when Anchorage was founded. In 1965, the federal court ruled that the Bureau of Indian Affairs (BIA) had no right to lease Tyonek Indian land for oil development without permission of the Indians themselves. The tribe subsequently sold rights to drill for oil and gas beneath the reservation to a group of oil companies for $12.9 million. The reservation status was revoked with the passage of the Alaska Native Claims Settlement Act in 1971..

The village has a federally recognized tribe, the Native Village of Tyonek (NVT). The 2000 US Census indicates that 95.3% of the 192 permanent residents are all or part Alaska Native. Of the 192 resident 64 were employed. The unemployment rate was 27.27%, although 55.56% of all adults were not in the work force. The median household income was $26,667, per capita income was $11,261, and 13.94% of residents were living below the poverty level. The Census also recorded 134 total housing units, 68 of which were vacant. 56 of the 68 vacant housing units are used seasonally. The village has a school attended by 44 students, and a health clinic, the Tyonek Health Clinic. Auxiliary health care is provided by Tyonek Volunteer Rescue Squad.

A piped water and sewer system serves the entire community. Water is derived from Second Lake, is treated and stored in a 175,000-gal. tank. Back-up water supplies are available from a lake near the airport. A small coin-operated washeteria, with one washer and dryer, is available. Electricity is provided by Chugach Electric Association, whose primary power plant

providing electricity for the Southcentral region of Alaska, including Anchorage, is located just north of Tyonek in Beluga.

The village is not accessible by road. Permission is required to land at the local 3,000' gravel airstrip, owned by the Village of Tyonek, although regularly-scheduled flights are available via Spernak Airways at Merill Field in Anchorage. A State-owned 4,100' gravel airstrip is available at Nikolai Creek, and a 2,400' gravel airstrip, owned by Arco Alaska, is located at Beluga. A local road connects to nearby Beluga. Barges deliver heavy goods to the village. http://www.beringsea.com/communities/index.php?community=377

ACDP Activities

ACDP began working with this group in July after Brandie Standifer, the local mental health aid, had contacted the Marine Advisory Program (MAP) for assistance. Terry Reeve a MAP Agent has been consulting the coop regarding its business plan. He plans to visit Tyonek in August. This visit provided the ACDP with an opportunity to learn more about the co-op's organization, and for us (ACDP) to provide the coop members with information about how the ACDP can assist the coop.

On July 13, 2007, Andrew Crow and Hans Geier from ACDP flew to Tyonek by float plane. Traveling to Tyonek in this way allowed a birds-eye view of a community that shows the effects of several large scale resource development projects, including oil and gas development, connection to the main electrical intertie, an extensive system of local roads, plus significant timber harvest within the last decade. There is an amazing amount of unused infrastructure including industrial facilities and housing in or near the village on Tyonek Native Corporation owned land. A workshop was presented to the membership in the local Village Council (Native Village of Tyonek (NVT)) building. The audience of from six to ten people was made up of both co-op members and community members. The meeting continued for several hours. .

The discussion included the co-op's past activities, the members goals, the issues facing the fishery, and relations between the coop, NVT and the Tyonek Native Corporation (TNC). The group is blessed with a very strong advocate, in Brandie who served as ACDP's contact in Tyonek, and provided a guided tour of the village, industrial facilities, fishing sites, and Old Tyonek accompanied by a detailed narrative.

The concept of a "New Generation" coop was not presented. New Generation cooperatives are useful when a coop can raise large investments from its members for costly value added processing. The membership of this coop seems interested in building their coop over time as it gains experience and members. The coop's stability fund sets a precedent for building the coop through increased unit retains or other patronage dividend.

Organization

The co-op began operating as part of the Native Village of Tyonek (the local tribal government) in 2005 as part of a pilot marketing and transportation project funded by the Alaska Fisheries Development Foundation and USDA Rural Development. The project was managed by Michael Reeves (no relation to Terry Reeve) of Reeve Transportation Consulting.

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The goal of the project was to develop a system to enable local fishermen to take advantage of early season Chinook and later season Coho salmon runs by improving the quality of their catch and arranging for direct transportation of the fish to Anchorage.

Past Operations

The pilot "co-op" program ran in 2005 and 2006 and was successful. Using grant funds the NTV purchased an ice making machine, ATV and trailer, twenty-five chest freezers, and other equipment. NTV and Reeve developed a program for producing high quality fish. In 2005 it created new markets for Tyonek fishermen and in 2006 it was able to increase the price paid to the fishermen by 24%. In 2006 the co-op handled 27600 pounds of fish and had a gross income of about $50,000. Of this, nearly $40,000 was paid directly to the co-op members, and paid $2400 into a "stability fund," to support continuation of the program. Reeve managed the project while NTV offered some administrative support, especially accounting.

NTV never incorporated the co-op as a separate organization and when Reeve Transportation stopped participating, the project floundered. Since NTV showed little interest in keeping the program going, Brandi and the fishermen have begun to organize themselves.

Current Operations

The TS Coop consists of nine permit holders including the five permit holders who caught most of the fish sold by Mike Reeve in 2006 and 2005. Several of the core permit holders are related to Brandie and are strong supporters of the Co-op idea. The commercial fishing members of the TS coop are residents (tribal members) of Tyonek, with strong community ties including children in local schools and homes located near their set net sites, most live a subsistence lifestyle, and other indications of active local involvement. They are very cognizant of the fishery being a sustainable resource that would always be available for them to exploit in a sustainable manner, unlike past resource development (timber, oil and gas, etc.). The members were also very concerned that value be captured in Tyonek, and not by non-resident processors.

This year (2007) the coop has had no trouble selling their kings. They sold them to Kenai River Seafood (KRS), an LLC run by a drift net fisherman that has treated the members fairly. Some of the co-op members sold to a cash buyer, Deep Creek Fisheries, but they did this as a way to get money that was owed them from last year. The fishers who sold the fish to Deep Creek have promised to pay 5% of their income to a co-op "stability fund."

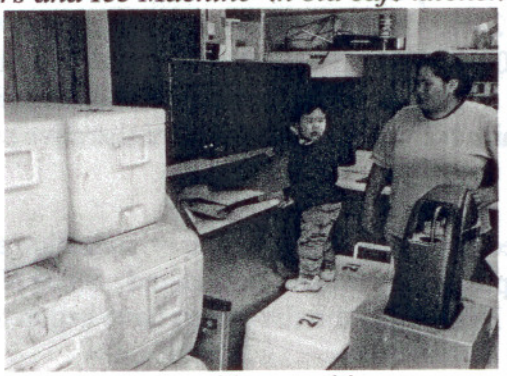
The fishermen want to keep improving quality and to get more money for their fish. They are interested in direct marketing and have a copy of MAPs direct marketing book. Several talked about finding contacts in the lower 48 – Chicago and New York – to get a higher price.

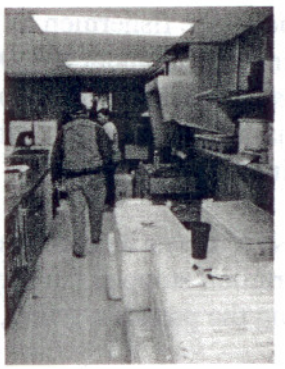
The system they have been using for kings is to have a bleeder bag on each boat and two large coolers. One of the coolers is filled with flake ice at the start of the period. The fishermen pick their nets as soon as the kings hit. The live fish are stunned, their gills are cut and they are put into a bleeder bag. The bags have one part ice and three parts salt water.

When the fish stop moving they put in an empty cooler with ice. Ten kings can fit one cooler, and the fishermen try to keep them straight. The water in the bleed bags is changed periodically.

They use the same process for reds and silvers. All the fish that are dead when they are picked from the nets are not sold. The fishermen make use of them for subsistence. The coolers are delivered back to the co-op at the end of the fishing period and the co-op pays a village resident to clean them with Clorox and maintain the ice machine.

Coolers and Ice Machine in old café kitchen





Coolers and ice machine

The ice machine and coolers are located in an old commercial kitchen owned by NVT. There is some question about whether or not the building will be given over to the Headstart program

Goals and Challenges

The co-op members' goal is to keep the coop going and to expand the services it offers to its members. Eventually they would like to offer membership to all of the commercial fishermen in their district (Upper Cook Inlet, Northern District, Western Sub-district).

To do this the co-op faces several challenges. It needs to build organizational capacity, and it needs a business plan.

Organizational Capacity

The coop members would like to make their coop an independent organization. The members felt that the cooperative was not a priority for NVT. They were unhappy with NVT's accounting for the money that had been paid into the stability fund, and disappointed that the USDA grant was terminated due to NVT's failure to report its activities. In order to establish an independent organization with its own bank accounts and the ability to apply for grants, or licenses for selling salmon commercially, the co-op will need to incorporate.

Incorporation is just one part of the process of building an appropriate administrative structure. Currently, like many other Alaska coops, the Tyonek Fishermen's' Co-op is administered on an ad hoc, voluntary basis. To be sustainable, co-ops need to develop and pay for an efficient administration. A large part of this is establishing an accounting and recordkeeping system. The ACDP has recognized the nearly universal need for administrative structure and accounting with most of the direct marketing co-op groups in Alaska.

Business Development

Obviously it makes no sense to register a cooperative or establish accounting and administrative systems if the underlying business cannot support and maintain a coop. It is imperative that the co-op members work out a realistic business plan. The total income to the coop in 2006 was the $2,363 was paid into the "stabilization fund." It is unlikely that the co-op will be able to support itself with an income of only $2,300 per year. Reeve Transportation Consulting was paid $40,000 a year from the AFDC grant to manage the Tyonek program. Either the percentage paid into the fund will need to increase, or the overall income moving through the co-op will have to increase.

The members have several ideas on how to increase income. They would like to find more markets both inside and outside of Alaska. Without Reeve Transportation Consulting to market their fish the co-op had difficulty finding markets for sockeye salmon. The members also discussed the need to upgrading the facility (owned by NVT) currently being used to repack the fish, where the ice machine is located. In discussions with Dean Steward of USDA Rural Development the ACDP learned that the equipment purchased under the USDA grant (ice machine, coolers, ATV and trailer) cannot simply be transferred from NVT to the coop. Under USDA regulations the equipment must be leased. Discussion of upgrading the facility, and use of NVT's equipment for the coop should be addressed in a comprehensive business plan.

Like the Alaska Seafood Harvest LLC, TS Coop is obviously the product of one individual's (Brandie) efforts, but she is obviously interested in seeing the coop become self sustaining, and able to hire support staff as needed. Brandie made it very clear that she is happy working as the mental health aid and that she does not want to be the co-op director. It was obvious that even at this early stage of organization, a plan of succession was an important part of Brandie's overall objective for the coop. Frequent mention was made of succession plans for the coop as well as for the fishery permits within the village.

Prospects

TS Coop is well on the way to cooperative formation, already acting in a cooperative manner which bodes very well for a producer oriented cooperative. The membership generally appeared to be in agreement with the goals and objectives of the manager (Brandie). Despite the complicated village political situation, the co-op seems to be moving in a direction where it will continue to grow and operate.

From the attendance at the meeting by most coop members, it was obvious that the membership represented a wide range of ages within the population of the community. The membership in general was very active in discussions and showed a very strong interest in addressing perceived problems in markets, control of local resources, and strengthening cooperative resources and actions. This bodes well for organization efforts.

Future Possibilities

Increasing volume

The 27000 pounds of fish harvested in 2006 were caught primarily by five permit holders. Limited Entry Commission records indicate that the residents of Tyonek hold 20 permits. The coop could easily increase the volume of fish it markets if it can get these permit holders to fish and sell their fish through the coop. To do this it will have to prove that it can generate more income for the permit holders. The pilot project showed that by increasing the price in 2005 the coop was able to attract more fishermen in 2006.

Marketing

Reeve Transportation Consulting developed one market FAVCO for Tyonek's fish. In 2007 the coop was not able to rebuild this market because it did not have the transportation link that Reeve had provided and there had been some problem with the final deliveries to FAVCO in 2006. Therefore in 2007 the co-op depended on KRS to market its fish. This worked well during the high value low volume king salmon run but KRS was not able to take the coops fish during the sockeye run. Clearly the coop will have to develop additional markets. Its relatively close proximity to Anchorage should make this easier than marketing from more remote fishing districts. The coop may also be able to get higher prices for its fish by accessing more distant markets.

Value Added Processing

It is a very obvious that the TS Coop is simply scratching the surface in terms of value added enterprises. Co-op members discussed the possibility of eventually doing more processing in Tyonek. Finding ways to use the lower quality fish, the fish that are dead when they are picked from the nets, is one obvious opportunity for the coop to increase income. Some forms of value added processing will only become economical if the coop and increase the volume of fish it receives. There is much opportunity for increasing the activity, volume, and value added activities through cooperative action, especially given the motivated membership and management of the TS Coop.

Purchasing

Fuel is one of the greatest expenses for commercial salmon fishermen. Fuel prices in Tyonek this summer were significantly higher than they were on the East side of Cook Inlet.

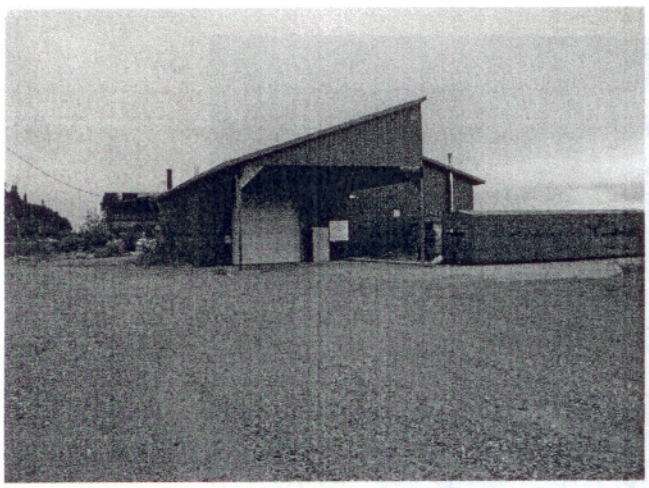
At one point in the summer KRS offered to bring several barrels of gas to the Tyonek fishermen. Pooling the purchase of fuel is another way that the coop could improve its member's bottom line.

Existing Infrastructure

The coop currently is unsure that it will be able to use the space it has been given in NVT's café. Any additional value added processing will require a more permanent space. Tyonek has several buildings and plots of land which have obvious opportunities for this. Resolving which of these buildings or pieces of land to use will require taking into consideration the relationship between the coop and the owners. For example, the TNC owns many land and infrastructure resources which would be of use to the coop, but it seemed as if the relationship between the village corporation and the Coop is strained.

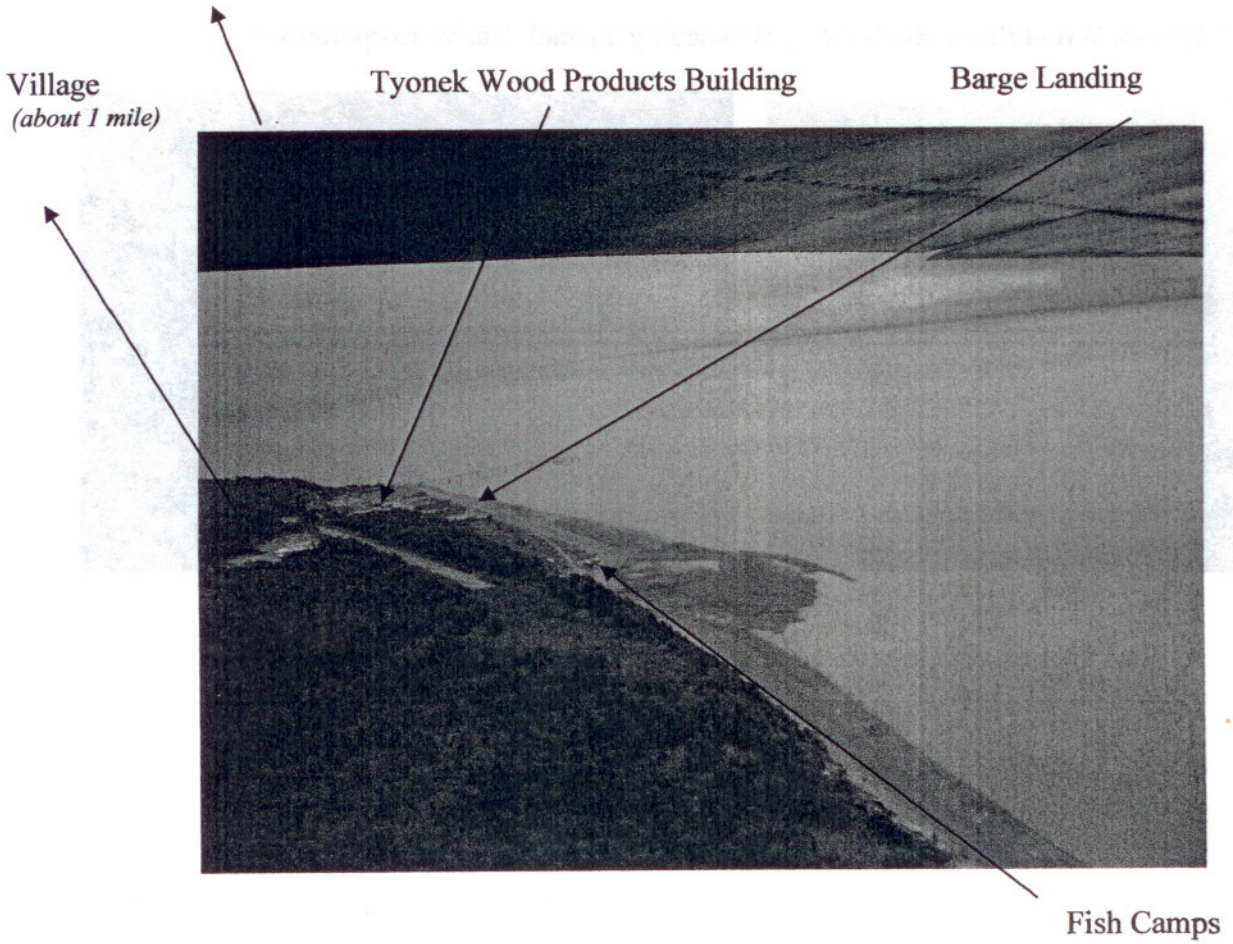
The best prospects for locating a co-op facility are near the Old Tyonek beach. The beach has a barge landing site, and is located near many of the coop member's fish camps. Nearby are several structures owned by TNC . One of these is the old Tyonek Wood Products building. Tyonek Wood Products was a project the village corporation set up to manufacture pre-fab log buildings. There are several other metal buildings there in various states of disrepair. This area has water and electricity.

Old Tyonek Wood Products Building (Owned by Tyonek Native Corporation)



Old metal frame building next to Tyonek Wood Products
(several others are located on the opposite side of TWP building)

Photo of dock area as we departed to the south



Action Plan

- Draft a business plan !!!!!

The Tyonek Fishermen's Co-op needs to develop a business plan. This plan should include, a discussion of markets, a plan for how the coop will be administered and how the coop will pay for its staff, a plan for transferring the use of the equipment purchased under the NVT grant to the coop.

Terry Reeve from the Marine Advisory Program would be a good resource to advise the co-op on what is realistic and how to find buyers for its fish. He can provide some of these services for free as part of the Marine Advisory Program but the coop members will have to do most of the work.

The USDA has several programs to help small, minority owned cooperatives. In late July USDA had a request for proposals for grants to pay for coops to conduct feasibility studies. ACDP gave Brandie and the coop members a copy of this rfp, and Alaska Manufactures Partnership was interested in working with the coop to submit a proposal.

- Work with USDA

USDA is an important source of funds for coops like this and it is important to maintain good relations with them. The fact that they closed their grant with NVT to support this project highlights the need to communicate with them. All of the equipment the coop uses was bought under this USDA grant and must be used in accordance with USDA regulations. The coop is actually doing something with the equipment and the USDA grant did create some positive results. It is important to communicate this to USDA and to work with them.

The Coop should prepare a report to Dean Stewart at USDA RD explaining the results of the grant, and what the coop has been doing this year. A letter explaining who the coop is and what it has been doing this year with the reports that Mike Reeve produced would be a good start.

It would also be good to have a lease agreement between NVT and the coop for the use of the equipment. At the very least a resolution from NVT stating its intention to lease the equipment would be good.

- Build Coop organization

  File Articles of Incorporation
  Draft By-laws for the cooperative
  Begin to draft membership agreements

These are all areas where the ACDP can help. Having the organization registered is the first step toward implementing the business plan that the coop members will be creating

Make sure that as many members as possible are included in all of these processes. This group impressed us with the depth of support from its members and its commitment to help Brandie keep the coop going. Don't lose that as you start to get more organized.

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Alaska Manufacturing Extension Partnership http://www.ak-mep.org/

Alaska Fisheries Development Foundation http://www.afdf.org/current_projects/index.html